



ecology and environment, inc.

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International Specialists in the Environment

MEMORANDUM

TO: Paul La Courreye, EPA Region IX Site Screening Coordinator

FROM: Lorene Flaming, Ecology and Environment, Inc. *LCF*

DATE: November 30, 1988

SUBJECT: Reevaluation of the Preliminary Assessment of Dos Palos Airport, November 1984.

TDD#: F9-8809-098

EPA ID#: CAD980736953

THROUGH: Tom Carter, Ecology and Environment, Inc. *TC*

COPY: FIT Master File
Chris Lichens, Ecology and Environment, Inc.
Don Plain, California Department of Health Services,
Sacramento
Bill Crooks, RWQCB Central Valley Region, Sacramento

INTRODUCTION

Under Technical Directive Document number F9-8709-019, Ecology and Environment, Inc.'s Field Investigation Team (FIT) has been tasked to reassess all Preliminary Assessments (PAs) in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) with "active" or "pending" status according to guidelines established to implement the Superfund Amendments and Reauthorization Act (SARA). During the course of this reassessment process, PAs were identified that contained insufficient information to allow an accurate reassessment. FIT has been subsequently directed to reevaluate and upgrade these PAs as needed to ensure that an accurate response determination is made.

The strategy for determination of further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is based solely on each site's potential to achieve a score high enough on the Hazard Ranking System (HRS) for inclusion on the National Priorities List (NPL). This strategy is intended to identify those sites posing the highest relative risk to human health or the environment. All other sites needing remedial or enforcement follow-up will be referred to the States or an appropriate Federal agency.

1b/1f/dpa/pa/re-do

recycled paper

This site was evaluated primarily using the original HRS model. Additionally, this site was also evaluated for its potential to score using the draft revised HRS model. The following is a summary of FIT's findings with regard to this site.

SUMMARY

Dos Palos Airport is located on a 40-acre site in Fresno County, 1.25 miles south of Dos Palos and 1 mile east of South Dos Palos. Both towns lie just north of the county line in Merced County. Since the early 1940s the site has been used for the aerial application of pesticides. The current operator is Spain-Air, owned by Bill and Bob Spain. The Spain brothers purchased the site in 1962 from the original operator and have since been assigned a separate EPA ID number (CAD981450604).

The site first came to the attention of local agencies in 1979 when the Regional Water Quality Control Board (RWQCB) began to inspect pesticide operations to determine compliance with new RWQCB pesticide rinsate guidelines (1). In a September 1979 site visit by RWQCB, staff found that Spain-Air collected pesticide rinsewater in an unlined ditch (300 feet by 3 feet by 4 to 6 feet), stored empty pesticide containers on soil in an uncontained area, and occasionally burned empty pesticide containers at the site. In addition, staff observed strong pesticide odors and soil staining. The inspection report concluded that containment structures were inadequate to prevent run-off migration to adjacent land or rinsewater percolation to groundwater, and that rinsewater disposal practices may have been responsible for the existing degradation of underlying groundwater (2). A water sample collected from the ditch on-site and analyzed for chlorinated hydrocarbons and organophosphorus pesticides revealed the presence of toxaphene (4.3 ppm) and DEF (25 ppm) (3).

In September 1982 the Department of Health Services (DOHS) conducted a site visit and observed the same waste disposal practices still in use. The report indicates that 600 to 700 gallons of rinsewater run-off from an equipment washdown pad was disposed in the unlined ditch per month (4). In 1984 DOHS performed a preliminary assessment and by 1985 the site was placed on the State Priorities List (5).

Agency reports indicate that Spain-Air has made attempts to correct its waste disposal problems. In 1984 the ditch was backfilled and in 1985 a new rinse and wash water containment system was installed. Since then, equipment washing has been performed on contained concrete slabs which drain to a central sump. Equipment washwater is recycled in a holding-evaporation tank located within the containment area (6).

In August 1985 The Twining Laboratories prepared a proposal for a Preliminary Geotechnical Engineering Investigation Contamination Assessment of Spain-Air under the direction of RWQCB. However, RWQCB staff indicate that the proposed inspection was never performed (7). In August and September 1986 DOHS collected composite soil samples on-site after receiving a complaint from an adjacent property owner. Lab

analysis for chlorinated pesticides, organophosphorus pesticides, carbamates, and phenoxy herbicides revealed the following contaminants: Diazinon (130 ug/g), DEF (43 ug/g), Ethion (13,000 ug/g), Thiodan I (770 ug/g), Thiodan II (330 ug/g), 2,4-D Acid (29 ug/g), Dinoseb (5.8 ug/g), Methomyl (1,900 ug/g), Dioxacarb (0.14 ug/g), and Carbaryl (0.6 ug/g) (8). DOHS received a second complaint about the site in January 1987. This time Mid Valley Fire District staff called to report that odors were emanating from discarded drums on-site and affecting downwind residential communities (9).

DOHS continues to inspect the site periodically to determine compliance with hazardous waste regulations (10); however, no remedial action has been taken. It appears that Spain-Air is on the expenditure plan scheduled for remedial investigation work under the State Superfund Program in 1990 (9).

Two aquifers underlie the site: a shallow one at 5 feet below ground surface (bgs) and a deep one at 55 feet bgs. Soil permeability is low to moderate (11). The Central California Irrigation District (Central) supplies all the irrigation and drinking water for the area. Central sells its water to the City of Dos Palos which in turn sells it to the North Dos Palos and South Dos Palos Water Districts (12, 13). Only a few residents rely on domestic well water (14, 15). Water bought from Central is withdrawn from the Dos Palos Colony Main Canal at a point upgradient from the site. However, the canal contains groundwater drawn from a well located just under 3 miles from the airport. This well taps the deep aquifer. Groundwater pumped into the Colony Canal is the sole source of drinking water during the winter months and is supplemented by surface water imported from the Delta-Mendota Canal the rest of the year (12). The total groundwater target population is at least 6,000 (14, 16). This figure is low because some of the groundwater is used for irrigation; however, FIT was unable to determine the number of acres irrigated with groundwater or the location of intakes.

*where to pump it
then 1/20/87*

According to the USGS Dos Palos and Oxalis 7.5-minute Quadrangle Maps, the nearest surface water is the Shain Drain, located less than 1,000 feet from the unlined ditch on-site. It is likely that this drain collects surface run-off from the site. The drain flows to the west until it connects with Laguna Canal 1.5 miles downstream. Although the canal may be used for irrigation water, it appears that the use is minimal. Most irrigation water in the area is supplied from canals located upgradient from the site (Dos Palos Colony Main, Main, Outside, and Delta-Mendota) (12).

The potential air target population living within 4 miles is approximately 5,500 (12). No release to air has been documented to date. However, several agencies have expressed concern and both the Fire Department and a local resident have lodged complaints about strong odors at the site (2, 4, 8, 9). Soil contamination has been documented at the airport, so a potential exists for pesticide contaminated dust to become airborne and affect nearby residents.

Evidence suggests that this site may pose a significant threat to human health and the environment. Soil samples collected on-site showed Ethion present at 13,000 ug/g, along with several other pesticides. A potential exists for a release to both the groundwater and air routes. Although it appears that the site has been placed on the State Priorities List, no remedial action has been taken and none is planned for the near future.

RECOMMENDATIONS

1) EPA

Based on a preliminary HRS Screening, FIT recommends that a high priority screening site inspection (hSSI) be planned under CERCLA for Dos Palos for the following reasons:

- o soil is heavily contaminated with several pesticides;
- o a potential exists for a release to groundwater because depth to groundwater is small, waste quantity is large, and soil is moderately permeable;
- o a potential exists for a release to air; and
- o both the air and groundwater target populations are large.

2) State or Other Agencies

Copies of this reevaluation will be sent to DOHS and RWQCB for their consideration.

EPA CONCURRENCE

Initial

Date

No Further Action Under CERCLA

High-Priority SSI

Medium-Priority SSI

pal

2.22.89

REFERENCES

- 1) RWQCB Memo from William Baldwin to Lawrence Glandon, "Inspection of Spain-Air Pesticide Applicators South of Dos Palos," 8/9/79.
- 2) RWQCB Memo from Lawrence Glandon to David Hollingsworth, "Flyby Inspection of Pesticide Rinsewater Management Facilities at Dos Palos Airport," 10/31/79.
- 3) The Twining Laboratories Lab Report for Dave Hollingsworth of RWQCB, 11/15/79.
- 4) DOHS, Report of Inspection of Spain-Air, Inc., 9/14/82.
- 5) DOHS Memo from Kevin Shaddy to Anthony Landis, 1/9/85.
- 6) The Twining Laboratories, "Proposal for Preliminary Geotechnical Engineering Investigation Contamination Assessment Spain-Air, August 1985.
- 7) FIT conversation with Ken Wilkins of RWQCB, 10/14/88.
- 8) DOHS Memo from Jerry Prine to Kit Davis, 10/29/86.
- 9) DOHS Complaint Log, received from Mike Ulvevadet of the Mid-Valley Fire District against Spain-Air, 1/22/87.
- 10) DOHS Hazardous Waste Surveillance and Enforcement Report, 3/3/88.
- 11) DOHS conversation with Larry Oberti of the Fresno County Environmental Health, 11/6/84.
- 12) FIT Conversation with Bob Fitz of the Central California Irrigation District, 11/22/88.
- 13) FIT conversation with Jim Snoten of the South Dos Palos Community Water District, 11/14/88.
- 14) FIT conversation with Paul Woodring of the Dos Palos City Water Plant, 10/20/88.
- 15) FIT conversation with Anita Fite of the Department of Water Resources, (DWR) 10/12/88.
- 16) DWR "SWEEPS" well inventory report for Merced County.

CONTACT REPORT

AGENCY/AFFILIATION: Central California Irrigation Dist.		
DEPARTMENT :		
ADDRESS/CITY: Los Banos		
COUNTY/STATE/ZIP:		
CONTACT(S)	TITLE	PHONE
1. Bob Fitz		(209) 826-1421
2.		
E & E PERSON MAKING CONTACT: Lonene Haming		DATE: 11/22/88
SUBJECT: Groundwater/surface water use		
SITE NAME: old Dos Palos Airport		EPA ID#:

The Colony main canal is used year-round, although its use is much diminished in the winter. Wells located along the canal are the primary source of water in winter and a supplementary source the rest of the year. District sells water from this canal to the city of Dos Palos. The city's diversion is located in section 11 Range 13E Township 11S, near Palm Ave. (approx. 1.7 miles north of site).

The district delivered 31,000 acre/ft. in 1987 and 17,000 in 1988. It irrigates 140,000 acres from several different canals. Canals are elevated and don't collect surface run-off unless run-off from a drain is pumped up into the canal. The drain near this site (Shain Drain) runs in a East to West direction, away from the canal.

The district has 7 wells on the Colony canal, 2 of which are within 3 miles: NE of SW of 17/11/13 and SW of SE of 17/11/13. Water is drawn from these wells at 55 and 68 feet below ground surface. (The wells are 1/2 mile apart.)

CONTACT REPORT

AGENCY/AFFILIATION: So. Dos Palos Water District		
DEPARTMENT :		
ADDRESS/CITY:		
COUNTY/STATE/ZIP: Merced, CA		
CONTACT(S)	TITLE	PHONE
1. Jim Snodden		(209) 392-2091
2.		
E & E PERSON MAKING CONTACT: Lorene Flaming		DATE: 11/14/88
SUBJECT: Groundwater use		
SITE NAME: Dos Palos Airport		EPA ID#:

This water district buys its water from the City of Dos Palos, which gets its water from surface sources. All water companies in the area get their water this way. He doesn't know of anyone who relies on well water.

Target population ~ 800

CONTACT REPORT

AGENCY/AFFILIATION: city of dos palos		
DEPARTMENT : water plant		
ADDRESS/CITY: dos palos		
COUNTY/STATE/ZIP: merced, CA		
CONTACT(S)	TITLE	PHONE
1. Paul Woodring		(209) 392-6201
2.		
E & E PERSON MAKING CONTACT: Lorene Fleming		DATE: 10/20/88
SUBJECT: Groundwater use		
SITE NAME: Dos Palos Airport		EPA ID#:

All drinking and irrigation water supplied by the city comes from the Delta Mendota Canal. They service approx. 5,500 people. Those who aren't on the city system rely on domestic wells. Spain Air and the 2 nearby houses receive city water. The only people he can think of who rely on wells is the Cotton Gin located on the west side of Hwy 33.

surface water comes from the Delta-Mendota pool located approximately 7 miles southeast of the site. 11/22/88
 In the summer months water from the pool flows into the main canal then into the D.P. Colony main canal where it is withdrawn for drinking water and irrigation. In the winter months the Delta-Mendota is nonoperable so water for the Colony Canal is pumped from wells located adjacent to the canal. Contact the Central California Irrigation Dist. in Los Banos for more information. (209) 826-1421

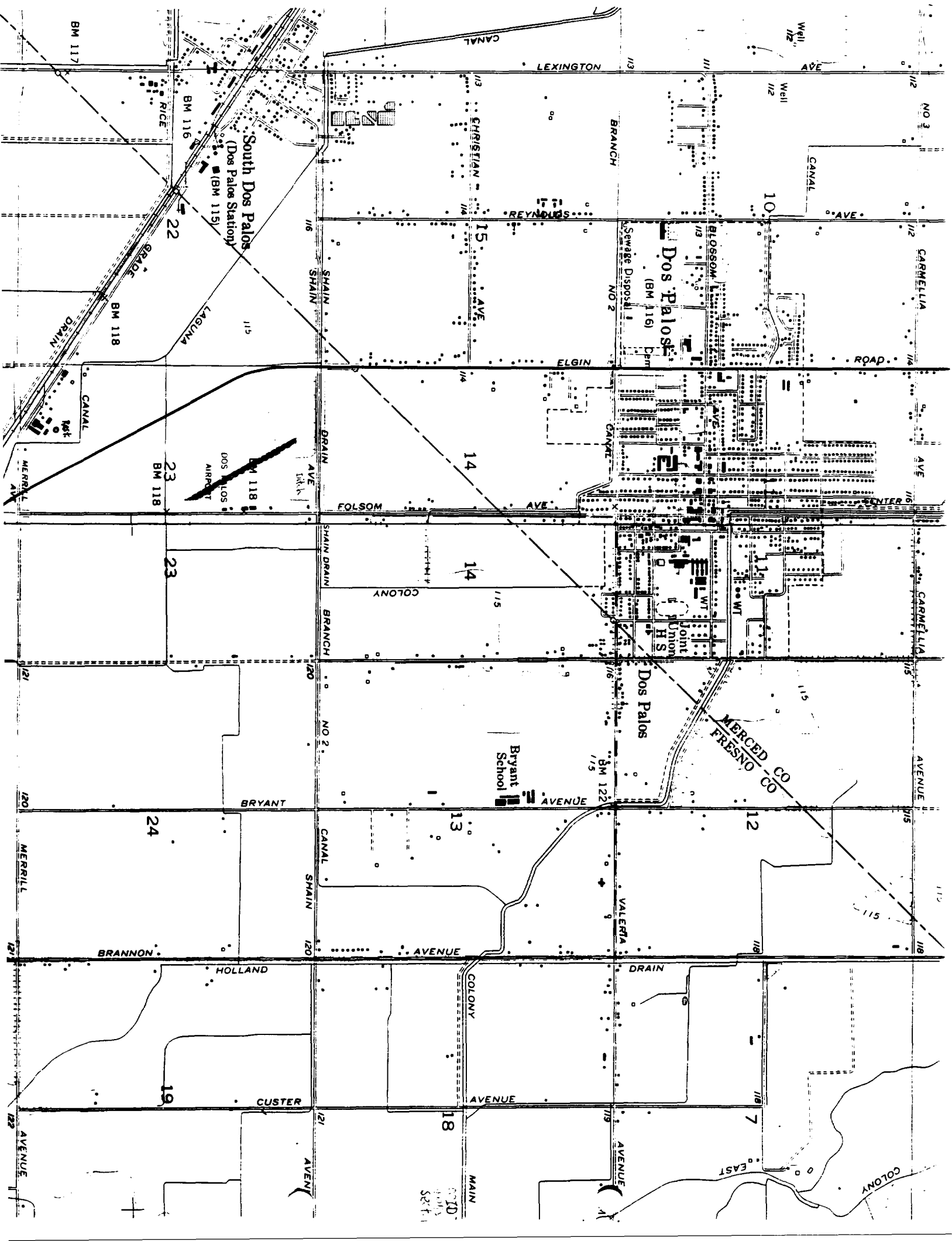
CONTACT REPORT

AGENCY/AFFILIATION: dept. of Water Resources		
DEPARTMENT :		
ADDRESS/CITY:		
COUNTY/STATE/ZIP: Fresno		
CONTACT(S)	TITLE	PHONE
1. Anita Fite		(209) 445-5038
2.		
E & E PERSON MAKING CONTACT: Lorene Flaming		DATE: 10/12/88
SUBJECT: well location		
SITE NAME: Dos Palos Airport		EPA ID#:

24 wells in 3 mile radius:

- 21 dom/mun/ind → some in sections 22 & 23
- 3 irrigation

many of these wells may be abandoned or inactive



CONTACT REPORT

AGENCY/AFFILIATION: DOHS		
DEPARTMENT : site mitigation		
ADDRESS/CITY: Sacramento		
COUNTY/STATE/ZIP:		
CONTACT(S)	TITLE	PHONE
1. Tony Landis	Megan Cambridge	920-7525 (916)
2. Noel Laverly		
E & E PERSON MAKING CONTACT: Lorene C. Fleming		DATE: 1/11/89
SUBJECT: LSI Prioritization Criteria		
SITE NAME: Dos Palas / Spain Air		EPA ID#:

According to the state of Calif. Health & Welfare
~~Plan~~ Expenditure Plan for the Hazardous Substance
 Clean-up Bond Act of 1984 (revision #3), Spain-Air
 is on the state priorities List.

- The responsible party will be paying for clean-up
- A remedial act plan is due by 9/89

Megan will send a copy of the schedule for this site

CONTACT REPORT

AGENCY/AFFILIATION: DOHS		
DEPARTMENT :		
ADDRESS/CITY: Fresno		
COUNTY/STATE/ZIP:		
CONTACT(S)	TITLE	PHONE
1. Kevin Shaddy		
2.		
E & E PERSON MAKING CONTACT: Lorene		DATE: 1/19/88
SUBJECT: state status		
SITE NAME: Dow talos		EPA ID#:

According to the 1988 Expenditure Plan, Dow talos was to be issued a remedial action order by DOHS by July 1988. Kevin does not believe this was done. Although a remedial action plan is to be completed by the IRP by September 1989, it appears that all deadlines have been rolled back a year or two because of a shortage of DOHS staff resources.

Some remedial action has been completed already in response to a RWACS order. Contact Scott Nevins for more information (209) 445-5116.

For the updated Expenditure Plan, contact Rob Wilson (916) 920-7525

CONTACT REPORT

AGENCY/AFFILIATION: RWQCB - Central Valley		
DEPARTMENT :		
ADDRESS/CITY: Fresno		
COUNTY/STATE/ZIP:		
CONTACT(S)	TITLE	PHONE
1. Ken Wilkins		
2. Scott Nevins		(209) 445-5116
E & E PERSON MAKING CONTACT: Lorene Flaming		DATE:
SUBJECT: site status		
SITE NAME: Dos Palos		EPA ID#:

0/14/89

1/20/89

In 1985 The Twining Laboratories completed a proposal for a preliminary geotechnical engineering investigation contamination assessment on Spair-Air (the PRP). However, staff indicate the the investigation was never performed and RWQCB is not currently working with the site. It is on a ~~on~~ list of sites to be addressed at some future time but they were not able to tell me when that might be. It appears that RWQCB does not have sufficient resources to address this site because it has not been given high priority in their agency.